



What is a Good Cents Home?

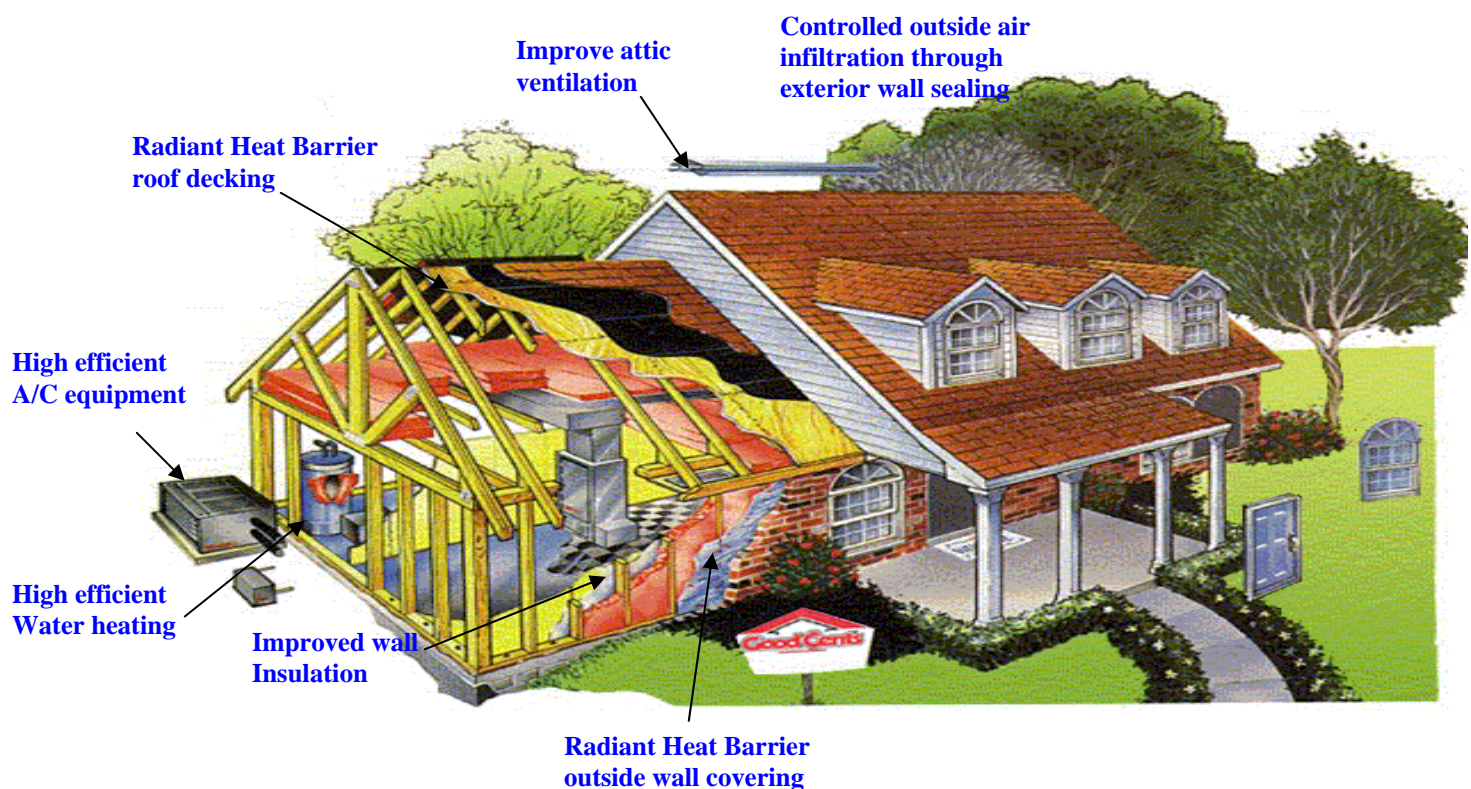
Why Buy a Good Cents Home?



The Good Cents Program is a national program utilized to promote specific conservation measures for new home construction. Good Cents Qualified New Homes are built for Energy Savings, Quality and Comfort. A Good Cents Home offers significant energy savings each and every year. Good Cents Homes are designed and built with construction techniques that exceed the current International Energy Codes. These savings are based on heating and cooling energy used and is achieved through a high quality of overall construction of the home.

- Energy efficient design, (designed to reduce solar heat load into house)
- Improved building envelope construction, (controlled outside air infiltration)
- Improve attic ventilation, (reduces attic temperature)
- High efficient heating and air conditioning systems, (14 SEER or better)
- Improved wall insulation, (sprayed applied fiberglass or cellulouse) less air infiltration
- Roof and exterior wall radiant barrier, (reduces solar heat)
- Attention to detail during construction, (overall better quality of construction)
- Significant Energy and fuel bill savings

The first step in building an Energy Efficient home is to consider the home as a system and the interaction of its various components. A builder must understand that any change in one part of the system will impact the house as a whole. Primary consideration should be given to the thermal envelope (outer covering) as the first line of defense between the indoor and outdoor environment. Selection of the proper components (walls, windows, doors, etc.) and the manner in which these components are installed will determine performance of the envelope. A builder only gets one opportunity in the life of the home to do it right.



Most people have the misconception that insulation can be substituted or used for proper air sealing. **Air can pass through insulation like people can breathe through a dust mask.** A builder must take time to create an unbroken air barrier in the building envelope by using caulk, foam, gaskets, and house-wrap. If the house is leaky the infiltration rate goes up and the insulation won't achieve its R-value (resistance value). In addition, the insulation R-value is also negatively impacted by any voids, gaps, or compression of the material. Proper installation of the insulation is just as important as the R-value of the insulation. **Energy consultants agree that some of the best advice to designers and homebuilders everywhere is to “do it right the first time”.** In our southern climate the heat is not the only battle, **HUMIDITY** is the hidden monster that is not talked about. Humidity travels with the air, so the less air infiltration into the home the less humidity. Just ask any A/C technician about the burden that high humidity creates on your air conditioning system and the impact it has on a home when trying to cool it.

It is common knowledge in the construction industry that A/C and heating systems are oversized to compensate for inferior construction. Given the new products and knowledge in today's industry, the **OLD** rule of thumb of 500 square feet per ton needs to be re-evaluated. With proper materials and construction, the additional capacity should not be required to compensate for cheap windows and poor sealing and insulation. **If the proper materials are used, and work is done correctly,** a builder and mechanical contractor should feel confident in properly sizing the A/C and heating system which in most cases always leads to lower capacity equipment and reduced front end cost for the builder. Properly sized and installed equipment can avoid reduced equipment life, high fuel bills, and the ability to remove moisture due to short cycling which will improve the homes overall comfort. The recent code changes have made huge strides in trying to address these issues, but there is still room for improvement.

Now, the big question. Will these energy saving improvements drastically increase the costs of home construction? Most of the energy saving improvement cost, if done at the start of construction is minimal and can be offset by reducing cost on cosmetic items. Keep in mind that things like paint, wallpaper, carpeting and other items can be changed and up-graded later with relatively little cost. With energy cost on the rise we cannot afford to ignore the importance of building an energy efficient home. After a home is built, it is too costly and almost impossible to make the energy improvements that are built into a Good Cents Home.

In short, education is the key to selecting and or building a better and more efficient home. Doing it right the first time and paying attention to detail can and will pay off in the long run for everyone.

If you are shopping for a new home, be sure to ask the builder for more details concerning the Good Cents Home Construction Techniques. If you are going to build you can call College Station Utilities Energy Personnel at (979)764-3660 or go to our web site at www.cstx.gov for more information.

